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DR-1242
20 May 82

AD A117137

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METEOROLOGICAL DATA REPORT,

14823A LANCE,
Missile Number 5358,
Round Number 378-AST,
20 May 1982

by

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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

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UNITED STATES ARMY ELECTRONICS COMMAND

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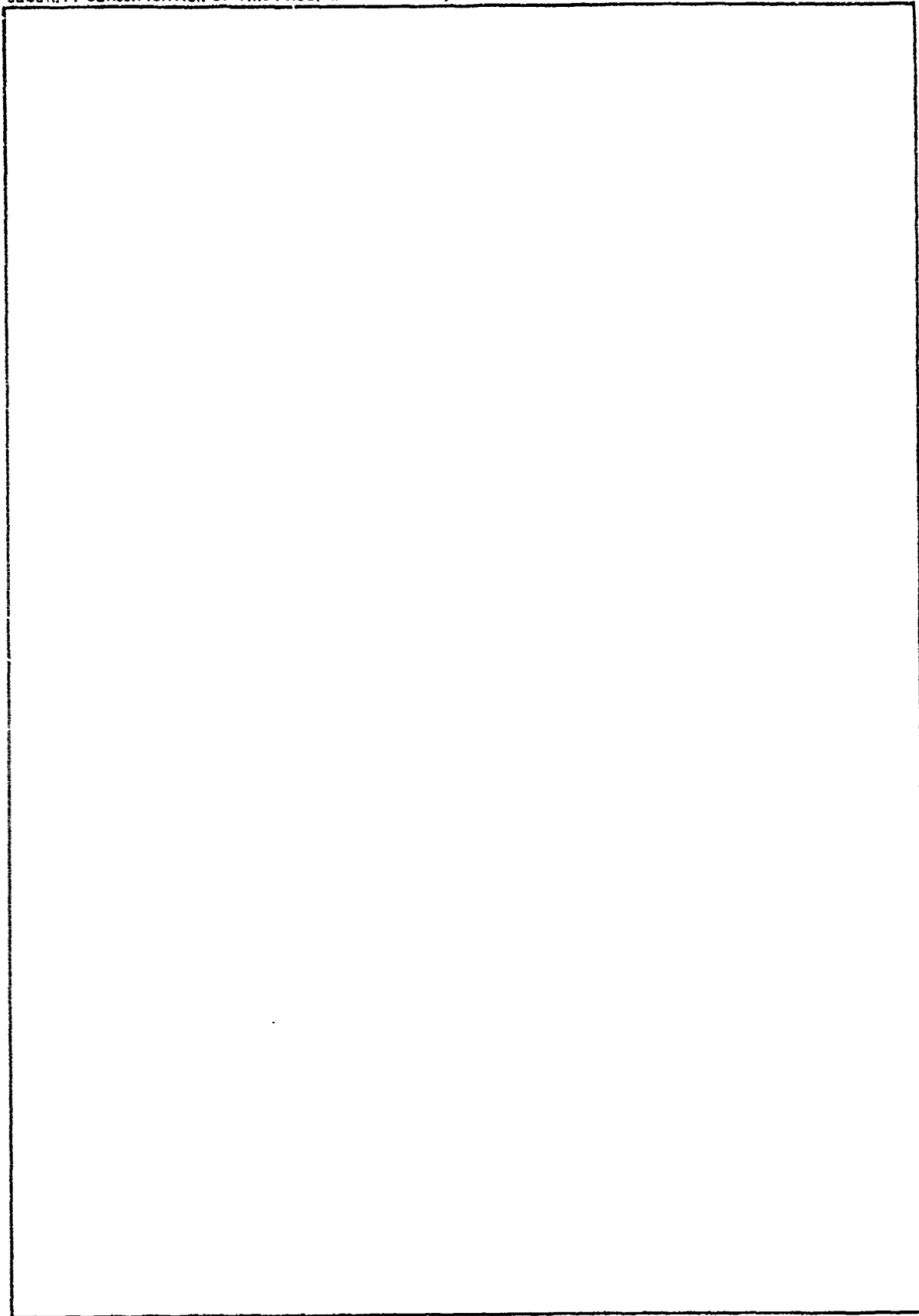
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18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 14823A LANCE, Missile Number 5358, Round Number 378-AST are presented in tabular form.		

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INTRODUCTION

14823A LANCE, Missile Number 5358, Round Number 378-AST, was launched from LC-39, White Sands Missile Range (WSMR), New Mexico, at 0910:03 MDT, 20 May 1982. The scheduled launch time was 0900 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the LC-39 Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from RPTS T-9 pibal observations at:

SITE AND ALTITUDE

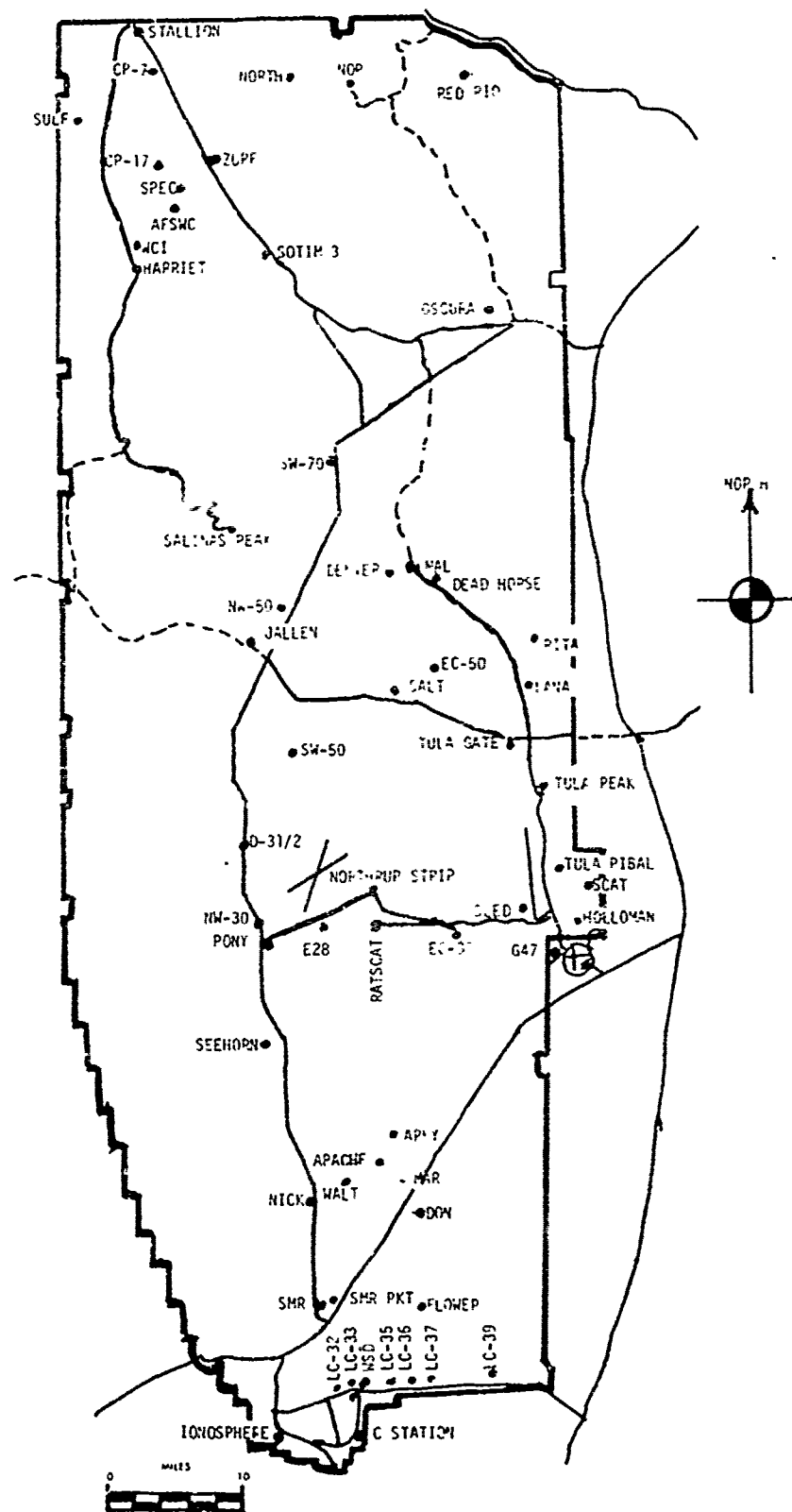
LC-36 3360 meters

(2) Air structure data (rawinsonde) were collected at the following Met Sites:

SITE AND TIME

WSD 0900 MDT (Launch Area Data)
APACHE 0800 MDT (Mid-Course Data)
HOLLOMAN 0900 MDT (Impact Area Data)

WSMR METEOROLOGICAL SITES



PROJECT SURFACE OBSERVATION

STATION LC-39									
TABLE 1		DATE 20 MAY 82		N=530,938.82		Y=186,564.96		H=4063.75	
TIME H D I	PRESSURE mb	TEMPERATURE °C	DEW POINT °C	RELATIVE HUMIDITY %	DENSITY g/m ³	DIRECTION deg In	SPEED kts	CHARACTER kts	VISIBIL- ITY
0910	875.9	25.1	0.7	20	1019		CALM		40

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	ANT	TYPE	HGT	ANT	TYPE	HGT	
	1	CS	25000				H ALQDS

PSYCHROMETRIC COMPUTATION

TIME:	09:10	
DRY BULB TEMP.	25.1	
WET BULB TEMP.	11.9	
WET BULB DEPR.	13.2	
DEW POINT	0.7	
RELATIVE HUMID.	20%	

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM LC-36

DATE 20 May 82

TIME 0900 MDT

COORDINATES (WSTM)

X = 504,466.00

$$Y = 190,782.16$$

H= 4037,21

NOTE: WIND DIRECTIONS ARE REFERENCED TO _____

HEIGHTS ARE METERS AGL X OR FEET AGL

HEIGHT ACL	DIRECTION DEGREES	SPEED KNOTS
sfc		CALM
60		CALM
120	062	05
180	106	08
240	085	07
300	058	70
360	045	08
420	047	09
480	031	09
540	012	10
600	348	12
660	341	13
720	338	13
780	329	13
840	320	12
900	314	13
960	310	16
1020	309	17
1080	306	16
1140	302	18
1200	298	20
1260	300	20
1320	297	19
1380	292	20
1440	290	24
1500	290	25
1560	293	23
1620	289	24
1680	286	27
1740	285	31

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
1800	282	32
1860	280	30
1920	279	30
1980	278	29
2040	272	29
2100	272	26
2160	271	24
2220	265	25
2280	260	25
2340	256	23
2400	256	21
2460	257	23
2520	255	25
2580	252	25
2640	253	26
2700	250	27
2760	248	28
2820	247	28
2880	246	28
2940	246	28
3000	242	28
3060	240	30
3120	240	30
3180	234	30
3240	235	29
3300	243	26
3360	244	24
3420	243	24
3480	240	23
3540	234	21

[illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM LC-36 DATE 20 May 82 TIME 0910 MDT

COORDINATES (WSTM) X= 504.466.00 Y= 190.782.16 H= 4037.21

HEIGHTS ARE METERS AGL X OR FEET AGL _____

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
sfc		CALM
60		CALM
120	064	03
180	089	06
240	066	07
300	028	08
360	018	10
420	013	10
480	360	10
540	351	11
600		09
660	346	09
720	339	11
780	333	11
840	314	11
900	305	12
960	310	12
1020	303	13
1080	299	14
1140	295	15
1200	293	14
1260	293	14
1320	292	18
1380	292	18
1440	291	19
1500	290	21
1560	291	21
1620	290	22
1680	290	25
1740	288	27
	284	28

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
1800	285	29
1860	284	30
1920	282	31
1980	281	31
2040	279	28
2100	275	28
2160	273	28
2220	270	26
2280	266	26
2340	265	26
2400	265	26
2460	261	28
2520	253	29
2580	250	28
2640	250	27
2700	247	26
2760	249	27
2820	254	27
2880	251	29
2940	245	30
3000	244	29
3060	243	27
3120	239	26
3180	235	27
3240	232	28
3300	230	26
3360	233	27
3420	235	24
3480	239	24
3540	243	27

[illegible]

TABLE-4

COMPUTER MET MESSAGES
20 May 1982

WSD 0900 MDT	APACHE 0800 MDT	HOLLOMAN 0900 MDT
METCM1324064	METCM1326064	METCM1329061
201500122880	201400121875	201500126875
00000000 29820880	00640004 29380880	00640008 29560875
01110006 29710870	01125012 29380869	01033008 29630865
02012006 29450845	02596018 29310845	02615010 29400840
03559011 29090806	03564017 28980806	03597011 29090802
04521020 28660760	04521022 28560760	04544018 28610756
05495021 28310716	05503026 28230715	05503020 28140712
06456021 28050674	06482018 27940673	06488021 27790670
07439025 27640634	07553013 27550633	07430021 27530630
08405025 27280596	08389034 27170595	08421023 27200592
09427020 26940560	09444022 26840558	09477018 27020556
10482015 26660525	10470020 26600524	10509017 26620521
11524017 26390492	11480021 26250491	11495017 26220489
12492013 25810446	12513019 25660445	12462011 25620443
13493012 24930390	13502016 24870389	13479013 24740387
14473012 24090340	14469011 24010338	14479010 23860336
15487013 23250294	15487013 23210293	15483016 23020291
16504021 22490254	16500023 22410252	16507026 22250250
17499020 21820217	17509029 21800216	17498029 21760214
18475034 21520186	18478030 21430185	18476027 21570183
19453019 21450159	19450026 21410158	19447018 21320156
20479021 21190135	20473020 20990134	20487017 20960133
21461023 21230115	21491028 21030114	21466027 21040113
22518008 21010098	22500022 20920097	22470009 20930096
23346008 21040084	23251010 20870083	23355014 21040082
24417010 21350071	24326008 21090070	24196005 21360070
25160008 21570061	25125007 21490060	25164012 21430060
26173022 21680052	26202010 21570051	26234007 21610051

STATION ALTITUDE 3989.00 FEET MSL
20 MAY 82 0900 MDT
ASCENSION NO. 223

SIGNIFICANT LEVEL DATA
1400020223
WHITE SANDS

GEODETIC COORDINATES
32.90043 LAT DEG
100.37033 LONG DEG

TABLE-5

PRESSURE GEOMETRIC MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
879.6	24.5	15.0
850.0	21.2	16.0
797.4	16.2	19.0
722.4	9.1	23.0
700.0	9.6	14.0
614.6	.9	15.0
580.4	-2.1	14.0
546.4	-5.4	10.0
500.0	-8.5	14.0
450.6	-14.5	15.0
400.0	-22.5	16.0
336.8	-33.0	16.0
300.0	-39.8	17.0
250.0	-49.1	
200.0	-58.4	
176.8	-57.5	
150.0	-59.2	
133.2	-62.1	
118.0	-60.2	
100.0	-63.4	
80.6	-63.4	
79.6	-60.1	
70.0	-59.9	
63.4	-57.3	
58.0	-57.3	
50.0	-56.0	
35.2	-52.6	
30.0	-49.0	
20.0	-45.1	
16.4	-42.3	
14.5	-37.3	

UPPER AIR DATA
1400020220
WHITE SANDS
TABLE-6

STATION ALTITUDE 3989.00 FEET MSL
20 MAY 62 0900 MDT
ASCENSION NO. 223

GEOMETRIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
3989.0	879.6	24.5	15.0	1027.4	672.8	0.0	1.0001249
4000.0	879.3	24.5	15.0	1027.2	672.7	0.0	1.0001249
4500.0	864.0	22.8	15.5	1015.2	670.8	2.2	1.0001245
5000.0	849.0	21.1	16.1	1003.3	668.9	4.4	1.0001241
5500.0	834.0	19.7	16.9	990.3	667.0	6.6	1.0001238
6000.0	819.3	18.3	17.7	977.3	665.7	8.8	1.0001234
6500.0	804.9	16.9	18.6	963.0	664.1	11.4	1.0001231
7000.0	790.5	15.6	19.3	952.3	662.5	14.2	1.0001228
7500.0	776.3	14.3	20.1	939.4	661.0	17.1	1.0001224
8000.0	762.4	13.0	20.8	926.8	659.5	19.2	1.0001221
8500.0	748.6	11.7	21.6	914.3	658.0	20.3	1.0001218
9000.0	733.2	10.4	22.3	902.0	656.4	21.1	1.0001214
9500.0	721.9	9.1	22.8	889.8	655.0	21.2	1.0001211
10000.0	708.8	9.4	17.6	872.9	653.2	21.3	1.0001204
10500.0	693.8	9.2	14.0	857.6	654.4	21.5	1.0001199
11000.0	683.0	8.0	14.2	843.7	653.4	21.8	1.0001190
11500.0	670.4	6.7	14.3	833.8	652.0	22.5	1.0001193
12000.0	658.0	5.5	14.5	822.1	650.5	23.4	1.0001189
12500.0	645.8	4.2	14.6	810.0	649.0	23.7	1.0001187
13000.0	633.9	3.0	14.8	799.2	647.0	24.1	1.0001184
13500.0	622.2	1.7	14.9	789.1	646.1	23.6	1.0001181
14000.0	610.6	0.6	14.9	776.7	644.7	23.2	1.0001178
14500.0	599.1	-0.4	14.6	764.9	643.5	22.9	1.0001175
15000.0	587.8	-1.4	14.2	753.2	642.3	22.6	1.0001172
15500.0	576.7	-2.5	14.2	741.8	641.1	21.8	1.0001169
16000.0	565.7	-3.5	14.9	730.5	639.9	20.9	1.0001166
16500.0	554.9	-4.6	15.5	719.3	638.6	19.5	1.0001164
17000.0	544.3	-5.5	15.9	708.2	637.4	17.8	1.0001161
17500.0	533.7	-6.2	15.5	696.3	636.0	16.5	1.0001158
18000.0	523.4	-6.9	15.0	684.6	635.8	16.2	1.0001155
18500.0	513.3	-7.6	14.6	673.1	635.0	16.6	1.0001153
19000.0	503.4	-8.3	14.2	661.9	634.2	16.8	1.0001150
19500.0	493.6	-9.2	14.1	651.4	633.0	16.8	1.0001147
20000.0	483.9	-10.4	14.3	641.4	631.6	15.0	1.0001145
20500.0	474.4	-11.5	14.5	631.5	630.2	13.3	1.0001143
21000.0	465.1	-12.7	14.7	621.9	628.8	12.8	1.0001140
21500.0	456.0	-13.8	14.9	612.3	627.4	12.5	1.0001138
22000.0	446.9	-15.1	15.1	603.1	625.9	12.4	1.0001136
22500.0	437.9	-16.4	15.2	594.1	624.3	12.4	1.0001134
23000.0	429.1	-17.8	15.4	585.2	622.8	12.2	1.0001132

STATION ALTITUDE 3989.0 FEET MSL
 20 MAY 62 0900 MDT
 ASCENSION NO. 223

UPPER AIR DATA
 14000-0223
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT DEG
 106.37033 LONG DEG

TABLE-6 cont'd

GEODETIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
23500.0	420.4	-19.2	15.6	570.5	320.9	272.3	1.000130
24000.0	411.9	-20.5	15.8	568.0	319.3	274.1	1.000128
24500.0	403.6	-21.9	15.9	559.5	317.0	276.0	1.000120
25000.0	395.3	-23.2	16.0	550.9	315.9	277.0	1.000124
25500.0	387.1	-24.5	16.0	542.2	314.3	278.9	1.000122
26000.0	379.0	-25.8	16.0	533.7	312.7	280.0	1.000120
26500.0	371.0	-27.1	16.0	525.2	311.1	280.0	1.000116
27000.0	363.3	-28.4	16.0	517.0	309.5	272.5	1.000116
27500.0	355.7	-29.7	16.0	508.9	307.9	260.3	1.000114
28000.0	348.2	-31.0	16.0	500.9	306.3	264.0	1.000112
28500.0	341.0	-32.3	16.0	493.0	304.7	262.0	1.000110
29000.0	333.7	-33.5	16.1	485.2	303.1	263.2	1.000108
29500.0	326.5	-34.8	16.3	477.2	301.4	267.0	1.000107
30000.0	319.4	-36.1	16.5	469.4	299.8	269.0	1.000105
30500.0	312.5	-37.4	16.6	461.6	298.2	270.0	1.000103
31000.0	305.7	-38.7	16.8	454.2	296.5	271.2	1.000101
31500.0	299.1	-40.0	16.7*	446.8	294.9	272.4	1.000100
32000.0	292.4	-41.1	14.6**	438.9	293.4	273.3	1.000098
32500.0	285.8	-42.3	12.5**	431.2	292.0	276.1	1.000096
33000.0	279.4	-43.4	10.4**	423.7	290.5	276.3	1.000094
33500.0	273.2	-44.6	8.3**	416.3	289.0	280.3	1.000093
34000.0	267.0	-45.7	6.1**	409.1	287.5	280.7	1.000091
34500.0	261.0	-46.9	4.0**	401.9	286.0	281.2	1.000090
35000.0	255.2	-48.1	1.9**	394.9	284.5	281.4	1.000088
35500.0	249.5	-49.2		388.0	283.0	281.0	1.000086
36000.0	243.6	-50.2		380.0	281.7	281.1	1.000085
36500.0	237.9	-51.2		373.4	280.4	281.9	1.000083
37000.0	232.4	-52.1		366.3	279.2	281.9	1.000082
37500.0	227.0	-53.1		359.4	277.9	280.7	1.000080
38000.0	221.7	-54.1		352.0	276.0	279.0	1.000079
38500.0	216.5	-55.1		345.9	275.3	277.0	1.000077
39000.0	211.4	-56.1		339.3	274.0	279.0	1.000076
39500.0	206.5	-57.1		332.9	272.7	281.3	1.000074
40000.0	201.7	-58.0		326.6	271.4	281.4	1.000073
40500.0	196.9	-58.3		319.3	271.1	279.7	1.000071
41000.0	192.2	-58.1		311.4	271.3	277.9	1.000069
41500.0	187.7	-57.9		303.8	271.5	271.6	1.000068
42000.0	183.2	-57.8		296.3	271.0	263.6	1.000066
42500.0	178.8	-57.6		289.0	272.0	257.0	1.000064
43000.0	174.6	-57.6		282.2	271.9	253.1	1.000063

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 5989.00 FEET MSL
20 MAY 82 0900 MDT
ASCENSION NO. 223

UPPER AIR DATA
140000Z
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE-6 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES TRUE	SPEED KNOTS	
43500.0	170.4	-57.9		275.8	571.6	253.4	23.5	1.000001
44000.0	160.4	-58.1		269.5	571.3	253.5	23.3	1.000000
44500.0	162.4	-58.4		263.4	570.9	255.1	22.8	1.000059
45000.0	150.5	-58.6		257.5	570.6	250.6	22.3	1.000057
45500.0	154.8	-58.9		251.6	570.3	251.6	21.3	1.000056
46000.0	151.1	-59.1		245.9	569.9	267.3	20.4	1.000055
46500.0	147.5	-59.6		240.6	569.5	272.2	20.4	1.000054
47000.0	143.9	-60.2		235.4	569.5	270.5	20.6	1.000052
47500.0	140.4	-60.8		230.4	567.7	277.6	21.1	1.000051
48000.0	137.1	-61.4		225.5	565.9	270.2	20.7	1.000050
48500.0	133.8	-62.0		220.7	565.1	262.6	20.7	1.000045
49000.0	130.5	-61.8		215.1	565.4	250.4	21.2	1.000048
49500.0	127.4	-61.4		209.6	565.9	250.7	21.9	1.000047
50000.0	124.3	-61.0		204.2	567.4	247.5	22.7	1.000045
50500.0	121.3	-60.6		198.9	567.9	252.9	23.1	1.000044
51000.0	118.4	-60.3		193.7	565.4	258.1	23.7	1.000043
51500.0	115.5	-60.6		189.4	565.0	262.2	24.0	1.000042
52000.0	112.7	-61.1		185.2	567.3	265.9	24.0	1.000041
52500.0	110.0	-61.6		181.1	565.7	269.1	22.5	1.000040
53000.0	107.4	-62.0		177.1	565.1	272.5	18.7	1.000039
53500.0	104.8	-62.5		173.2	563.4	277.6	15.1	1.000039
54000.0	102.2	-63.0		169.4	564.8	287.2	11.9	1.000038
54500.0	99.7	-63.4		165.7	564.2	302.7	9.3	1.000037
55000.0	97.3	-63.4		161.6	564.2	302.5	7.8	1.000036
55500.0	94.9	-63.4		157.7	564.2	300.6	6.3	1.000035
56000.0	92.6	-63.4		153.9	564.2	291.4	4.3	1.000034
56500.0	90.4	-63.4		150.1	564.2	280.4	2.3	1.000033
57000.0	88.2	-63.4		146.4	564.2	184.7	3.1	1.000033
57500.0	86.0	-63.4		142.9	564.2	180.4	5.5	1.000032
58000.0	83.9	-63.4		139.4	564.2	163.2	7.9	1.000031
58500.0	81.9	-63.4		136.0	564.2	160.7	9.9	1.000030
59000.0	79.9	-60.9		131.2	567.5	165.5	11.3	1.000029
59500.0	78.0	-60.1		127.5	568.7	163.2	12.3	1.000028
60000.0	76.1	-60.0		124.4	566.7	160.1	11.0	1.000028
60500.0	74.3	-60.0		121.4	565.8	204.6	9.9	1.000027
61000.0	72.5	-60.0		118.5	565.8	220.5	9.6	1.000026
61500.0	70.8	-59.9		115.6	565.9	240.6	11.1	1.000026
62000.0	69.1	-59.6		112.7	569.4	260.4	13.0	1.000025
62500.0	67.4	-58.9		109.7	570.2	264.4	14.1	1.000024
63000.0	65.8	-58.3		106.7	571.1	267.5	15.2	1.000024

GEODETIC COORDINATES
32.40045 LAT DEG
106.37033 LON DEG

UPPER AIR DATA
140002Z
WHITE SANDS

STATION ALTITUDE 3489.0 FEET MSL
20 MAY 82 0900 MDT
ASCENSION NO. 223

TABLE-6 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
63500.0	64.3	-17.7		103.9	571.9	267.5	1.000023
64000.0	62.7	-17.3		101.3	572.4	267.5	1.000023
64500.0	61.3	-17.3		98.9	572.4	102.4	1.000022
65000.0	59.8	-17.3		96.5	572.4	88.7	1.000021
65500.0	58.4	-17.3		94.2	572.4	88.9	1.000021
66000.0	57.0	-17.1		92.0	572.6	89.7	1.000020
66500.0	55.7	-16.9		89.7	572.6	90.3	1.000020
67000.0	54.4	-16.7		87.5	573.1	91.9	1.000019
67500.0	53.1	-16.5		85.3	573.4	96.1	1.000019
68000.0	51.8	-16.3		83.3	573.7	103.6	1.000019
68500.0	50.6	-16.1		81.2	573.9	117.3	1.000018
69000.0	49.4	-15.9		79.2	574.2	134.2	1.000018
69500.0	48.3	-15.7		77.3	574.5	148.4	1.000017
70000.0	47.1	-15.4		75.4	574.8	175.5	1.000017
70500.0	46.0	-15.2		73.6	575.1	201.4	1.000016
71000.0	45.0	-15.0		71.8	575.4	229.1	1.000016
71500.0	43.9	-14.7		70.0	575.7	266.6	1.000016
72000.0	42.9	-14.5		68.3	576.0	280.4	1.000015
72500.0	41.9	-14.3		66.7	576.3	308.2	1.000015
73000.0	40.9	-14.1		65.1	576.6	328.6	1.000014
73500.0	40.0	-13.8		63.5	576.9	352.0	1.000014
74000.0	39.0	-13.6		61.9	577.2	10.6	1.000014
74500.0	38.1	-13.4		60.4	577.5	39.2	1.000013
75000.0	37.2	-13.1		58.9	577.8	62.2	1.000013
75500.0	36.4	-12.9		57.5	578.1	83.6	1.000013
76000.0	35.5	-12.7		56.1	578.4	59.9	1.000012
76500.0	34.7	-12.3		54.7	579.0	43.6	1.000012
77000.0	33.9	-11.7		53.3	579.7	33.2	1.000012
77500.0	33.1	-11.2		52.0	580.4	290.5	1.000012
78000.0	32.4	-10.7		50.7	581.0	273.1	1.000011
78500.0	31.6	-10.2		49.4	581.7	270.5	1.000011
79000.0	30.9	-9.7		48.1	582.4	260.7	1.000011
79500.0	30.2	-9.1		46.9	583.1	267.6	1.000010
80000.0	29.5	-8.8		45.6	583.5	267.2	1.000010
80500.0	28.8	-8.6		44.7	583.8	267.0	1.000010
81000.0	28.2	-8.4		43.7	584.0	267.0	1.000010
81500.0	27.5	-8.2		42.7	584.3	267.0	1.000009
82000.0	26.9	-8.0		41.7	584.6	267.0	1.000009
82500.0	26.3	-7.7		40.7	584.9	267.0	1.000009
83000.0	25.7	-7.5		39.7	585.2	267.0	1.000009

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

UPPER AIR DATA
14000Z
WHITE SANDS
TABLE-6 CONT'D

STATION ALTITUDE 3489.00 FEET . SL
20 MAY 62 0900 MDT
ASCENSION NO. 223

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	WIND SPEED KNOTS	WIND DIRECTION DEGREES (T)	WIND SPEED KNOTS	INDEX OF REFRACTION
83500.0	25.1	-47.3	38.0	585.5	207.0	15.9	1.000009
84000.0	24.6	-47.1	37.9	585.0	207.0	15.9	1.000008
84500.0	24.0	-46.9	37.0	580.0	207.0	15.9	1.000008
85000.0	23.5	-46.6	36.1	580.3	207.0	15.9	1.000008
85500.0	22.9	-46.4	35.3	580.6	206.7	12.4	1.000008
86000.0	22.4	-46.2	34.4	580.9	93.4	3.7	1.000008
86500.0	21.9	-46.0	33.6	587.2	89.2	19.8	1.000007
87000.0	21.4	-45.8	32.8	587.5	89.7	36.0	1.000007
87500.0	20.9	-45.5	32.1	587.7	89.4	41.5	1.000007
88000.0	20.5	-45.3	31.3	580.0	90.1	43.7	1.000007
88500.0	20.0	-45.1	30.6	585.3	90.6	46.0	1.000007
89000.0	19.6	-44.8	29.9	580.7	91.5	42.9	1.000007
89500.0	19.1	-44.5	29.1	589.1	92.8	28.2	1.000006
90000.0	18.7	-44.2	28.5	589.5	90.8	13.6	1.000006
90500.0	18.3	-43.8	27.0	589.9	214.0	2.2	1.000006
91000.0	17.9	-43.5	27.1	590.3	240.7	2.4	1.000006
91500.0	17.5	-43.2	26.5	590.6	269.0	3.1	1.000006
92000.0	17.1	-42.9	25.9	591.2	262.5	4.1	1.000006
92500.0	16.7	-42.6	25.3	591.6	270.0	4.5	1.000006
93000.0	16.4	-42.2	24.7	592.1	271.4	5.1	1.000005
93500.0	16.0	-41.3	24.0	593.2	260.9	5.6	1.000005
94000.0	15.6	-40.4	23.4	594.4			1.000005
94500.0	15.3	-39.5	22.8	595.5			1.000005
95000.0	15.0	-38.6	22.2	596.7			1.000005
95500.0	14.6	-37.7	21.7	597.4			1.000005

STATION ALTITUDE 3989.0 FEET SL
20 MAY 62 0900 MDT
ASCENDING NO. 223

MANDATORY LEVELS
140020Z73
WHITE SANDS

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

TABLE-7

PRESSURE EQUIPOTENTIAL		TEMPERATURE		REL. HUMID.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEW POINT	PERCENT		DIRECTION	SPEED
						(KNOTS)	(KNOTS)
850.0	4962.	21.2	-5.0	16.		329.5	4.2
800.0	6666.	16.5	-7.3	19.		309.9	14.4
750.0	8450.	11.8	-9.5	21.		297.3	20.2
700.0	10330.	9.6	-16.5	14.		271.7	21.4
650.0	12327.	4.6	-20.1	15.		247.6	23.6
600.0	14445.	-2.4	-24.1	15.		231.4	22.9
550.0	16708.	-5.0	-27.0	16.		248.1	18.7
500.0	19148.	-8.5	-31.1	14.		294.0	10.9
450.0	21798.	-14.6	-35.4	13.		270.0	12.4
400.0	24680.	-22.5	-41.3	10.		270.7	11.5
350.0	27845.	-30.7	-48.1	10.		263.4	12.2
300.0	31369.	-39.8	-55.3	17.		272.2	12.6
250.0	35376.	-49.1				281.8	20.6
200.0	40081.	-58.4				280.9	24.6
175.0	42843.	-57.6				253.4	23.4
150.0	46024.	-59.2				268.7	20.2
125.0	49741.	-61.1				246.9	24.6
100.0	54280.	-63.4				299.7	9.6
80.0	58779.	-61.2				180.5	11.1
70.0	61514.	-59.9				253.8	12.0
60.0	64699.	-57.3				80.0	10.0
50.0	68490.	-56.0				124.0	9.2
40.0	73170.	-53.8				349.0	2.7
30.0	79287.	-49.0				267.7	12.2
25.0	83230.	-47.2				287.0	15.9
20.0	88097.	-45.1				90.0	43.9
15.0	94468.	-38.7					

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3951.40 MSL
20 MAY 32
ASLENSION 10. 28 0800 MDT

SIGNIFICANT WEATHER DATA
14000500Z
APACHE

SYNOPTIC COORDINATES
32.62700 LAT DEG
106.39352 LONG DEG

TABLE-8

PRESSURE	GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		RELATIVE HUMIDITY PERCENT
		AIR DEGREES CENTIGRADE	AIR DEGREES FAHRENHEIT	
879.0	3951.4	20.2	-4.2	19.0
859.0	4918.7	14.9	-3.7	20.0
725.0	9298.0	9.0	-7.0	59.0
700.0	10280.9	8.3	-13.9	19.0
567.0	15937.2	-4.5	-23.5	21.0
534.2	17401.7	-6.3	-27.9	16.0
500.0	19091.6	-9.8	-30.8	16.0
400.0	24615.1	-22.0	-40.0	13.0
327.8	29301.4	-35.1	-50.0	20.0
300.0	31315.7	-39.8	-54.0	21.0
250.0	35335.1	-49.0		
220.2	37281.6	-54.0		
200.0	40952.7	-57.9		
182.2	41835.5	-60.2		
164.0	44160.8	-67.5		
150.0	46006.9	-69.3		
127.0	49290.3	-64.6		
109.4	52413.3	-62.0		
100.0	54742.4	-64.1		
77.0	59510.8	-64.7		
70.0	61451.4	-61.8		
65.6	62773.1	-61.6		
60.0	64621.1	-57.9		
50.0	68422.9	-57.4		
33.6	76733.4	-57.0		
30.0	79133.2	-52.1		
20.0	87090.4	-48.5		
15.5	93525.4	-41.9		

STATION ALTITUDE 3951.00 FEET SL
20 MAY 62
ASCENSION NO. 28 0800 MDT

UPPER AIR DATA
1400030026
AP 04E

GEODETIC COORDINATES
32.62700 LAT DEG
106.39352 LONG DEG

TABLE-9

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/S	WIND DATA DIRECTION (IN) SPEED KNOTS	INDEX OF REFRACTION
3951.4	879.6	20.2	19.0	1042.3	667.9	300.0	1.000252
4000.0	870.1	20.2	19.1	1040.8	667.9	350.1	1.000252
4500.0	802.7	20.0	19.6	1023.0	667.7	330.0	1.000248
5000.0	847.5	19.7	20.2	1000.1	667.4	329.1	1.000245
5500.0	832.4	18.5	21.3	992.3	665.9	323.7	1.000241
6000.0	817.5	17.2	22.5	976.8	664.5	323.0	1.000238
6500.0	802.9	16.0	23.6	965.5	663.1	315.0	1.000235
7000.0	788.5	14.7	24.8	952.3	661.1	308.0	1.000231
7500.0	774.4	13.5	25.9	939.4	660.2	301.1	1.000228
8000.0	760.0	12.2	27.0	926.7	658.0	293.7	1.000224
8500.0	747.0	11.0	28.2	914.1	657.3	297.0	1.000221
9000.0	733.6	9.7	29.3	901.8	655.8	285.1	1.000218
9500.0	720.4	8.9	27.7	888.5	654.8	283.7	1.000215
10000.0	707.3	8.5	22.1	873.7	654.2	283.3	1.000206
10500.0	694.2	7.8	19.1	859.9	653.3	270.9	1.000201
11000.0	681.3	6.6	19.3	847.3	652.0	269.4	1.000198
11500.0	668.5	5.5	17.4	835.0	650.8	258.9	1.000195
12000.0	656.0	4.3	19.6	822.8	649.3	249.0	1.000191
12500.0	643.8	3.2	19.8	810.6	647.9	247.4	1.000188
13000.0	631.7	2.0	20.0	799.1	646.5	243.1	1.000185
13500.0	619.9	.9	20.2	787.5	645.2	242.4	1.000182
14000.0	608.3	-3	20.3	776.0	643.8	240.0	1.000179
14500.0	597.0	-1.4	20.5	764.8	642.4	238.0	1.000176
15000.0	585.8	-2.6	20.7	753.7	641.0	238.0	1.000173
15500.0	574.9	-3.7	20.9	742.6	639.7	242.0	1.000171
16000.0	564.0	-4.7	20.5	731.5	638.5	240.5	1.000168
16500.0	553.2	-5.3	18.9	719.0	637.8	230.9	1.000164
17000.0	542.6	-5.8	17.3	706.8	637.1	235.4	1.000161
17500.0	532.1	-6.5	16.0	694.9	635.3	200.0	1.000158
18000.0	521.8	-7.5	16.0	684.1	635.0	267.0	1.000155
18500.0	511.7	-8.6	16.0	673.5	633.6	275.9	1.000153
19000.0	501.8	-9.6	16.0	663.1	632.5	275.0	1.000150
19500.0	491.8	-10.8	16.2	652.8	631.2	273.0	1.000148
20000.0	482.0	-11.9	16.5	642.6	629.7	274.4	1.000145
20500.0	472.3	-13.1	16.8	632.6	628.3	277.0	1.000143
21000.0	462.9	-14.3	17.0	622.6	626.9	280.0	1.000141
21500.0	453.6	-15.5	17.3	613.1	625.5	290.0	1.000138
22000.0	444.6	-16.6	17.6	603.6	624.0	291.0	1.000136
22500.0	435.7	-17.8	17.9	594.3	622.6	291.0	1.000134
23000.0	427.0	-19.0	18.1	585.1	621.1	290.5	1.000132

STATION ALTITUDE 3951.40 FEET MSL
20 MAY 62
ASCENSION NO. 28

0800 MDT

060000000000
UPPER AIR DATA
PFACT

060000000000
UPPER AIR DATA
PFACT

TABLE 1.0 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	RELATIVE HUMIDITY PERCENT	DENSITY GM/CM ³	SPEED OF SOUND M/SEC	WIND DIRECTION DEGREES (TR)	SPEED KNOTS	INDEX OR REFERENCE
23500.0	413.4	-20.2	13.4	570.1	619.7	289.4	18.4	1.000130
24000.0	410.1	-21.4	13.7	567.2	618.2	289.9	18.2	1.000128
24500.0	406.9	-22.5	13.9	564.3	616.6	289.3	17.9	1.000126
25000.0	403.5	-23.8	14.1	561.7	615.2	289.9	17.4	1.000123
25500.0	400.2	-25.1	14.2	559.0	613.8	278.0	16.7	1.000121
26000.0	397.1	-26.4	14.3	556.5	612.5	278.6	15.7	1.000119
26500.0	394.2	-27.7	14.4	554.1	610.3	277.9	14.1	1.000117
27000.0	391.5	-29.1	14.5	551.8	608.7	277.1	11.9	1.000115
27500.0	388.9	-30.4	14.6	549.7	607.0	276.4	10.7	1.000114
28000.0	386.4	-31.7	14.7	547.8	605.4	275.3	10.3	1.000112
28500.0	384.0	-33.0	14.8	545.9	603.7	274.7	10.5	1.000110
29000.0	381.7	-34.3	14.9	544.2	602.1	273.0	11.0	1.000108
29500.0	379.5	-35.6	15.0	542.6	600.5	271.4	10.8	1.000106
30000.0	377.3	-36.9	15.1	541.1	599.0	270.9	10.4	1.000105
30500.0	375.2	-38.2	15.2	539.7	597.5	270.4	10.8	1.000103
31000.0	373.1	-39.5	15.3	538.4	596.0	270.0	11.5	1.000101
31500.0	371.1	-40.8	15.4	537.2	594.5	269.5	12.4	1.000099
32000.0	369.1	-42.1	15.5	536.1	593.0	269.1	13.4	1.000098
32500.0	367.1	-43.4	15.6	535.1	591.4	268.7	14.4	1.000096
33000.0	365.1	-44.7	15.7	534.1	589.9	268.4	15.4	1.000094
33500.0	363.1	-46.0	15.8	533.1	588.3	268.0	16.7	1.000093
34000.0	361.1	-47.3	15.9	532.1	586.7	267.6	18.9	1.000091
34500.0	359.1	-48.6	16.0	531.1	585.1	267.2	21.1	1.000089
35000.0	357.1	-49.9	16.1	530.1	583.5	266.8	23.0	1.000088
35500.0	355.1	-51.2	16.2	529.1	582.0	266.4	24.6	1.000086
36000.0	353.1	-52.5	16.3	528.1	580.5	266.0	25.5	1.000085
36500.0	351.1	-53.8	16.4	527.1	579.0	265.6	26.4	1.000083
37000.0	349.1	-55.1	16.5	526.1	577.5	265.2	27.4	1.000082
37500.0	347.1	-56.4	16.6	525.1	576.0	264.8	28.2	1.000080
38000.0	345.1	-57.7	16.7	524.1	574.5	264.4	28.4	1.000078
38500.0	343.1	-59.0	16.8	523.1	573.0	264.0	28.2	1.000077
39000.0	341.1	-60.3	16.9	522.1	571.5	263.6	27.1	1.000075
39500.0	339.1	-61.6	17.0	521.1	570.0	263.2	26.1	1.000073
40000.0	337.1	-62.9	17.1	520.1	568.5	262.8	25.5	1.000072
40500.0	335.1	-64.2	17.2	519.1	567.0	262.4	25.2	1.000070
41000.0	333.1	-65.5	17.3	518.1	565.5	262.0	24.6	1.000069
41500.0	331.1	-66.8	17.4	517.1	564.0	261.6	24.4	1.000068
42000.0	329.1	-68.1	17.5	516.1	562.5	261.2	24.0	1.000066
42500.0	327.1	-69.4	17.6	515.1	561.0	260.8	23.1	1.000065
43000.0	325.1	-70.7	17.7	514.1	559.5	260.4	22.4	1.000063

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3951.00 FEET MSL
20 MAY 62
ASCENSION NO. 28 0800 MDT

UPPER AIR DATA
1400500Z
APACHE

GEOLITIC COORDINATES
32.02700 LAT DEG
106.39552 LONG DEG

TABLE-9 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND METERS PER SECOND	WIND DATA DIRECTION SPEED KNOTS	INDEX OF REFRACTION
43500.0	169.3	-58.3		274.0	571.0	29.9	1.000061
44000.0	165.3	-57.7		267.2	571.0	27.7	1.000060
44500.0	161.3	-58.0		261.2	571.4	25.3	1.000058
45000.0	157.5	-58.8		255.9	570.4	24.7	1.000057
45500.0	153.7	-59.5		250.7	569.4	24.1	1.000056
46000.0	150.0	-60.3		245.0	568.4	22.3	1.000055
46500.0	146.4	-60.9		240.3	567.4	20.9	1.000054
47000.0	142.9	-61.6		235.2	566.0	19.0	1.000052
47500.0	139.4	-62.3		230.2	565.0	18.6	1.000051
48000.0	136.0	-62.9		225.4	564.4	19.3	1.000050
48500.0	132.7	-63.6		220.6	564.0	20.3	1.000049
49000.0	129.5	-64.2		215.9	563.1	21.8	1.000048
49500.0	126.3	-64.4		210.9	562.4	23.3	1.000047
50000.0	123.3	-64.0		205.2	563.4	24.4	1.000046
50500.0	120.3	-63.6		199.9	564.0	25.7	1.000045
51000.0	117.3	-63.2		194.7	564.5	26.4	1.000043
51500.0	114.5	-62.8		189.5	563.1	27.2	1.000042
52000.0	111.7	-62.3		184.0	563.0	28.6	1.000041
52500.0	109.0	-62.1		179.0	560.0	30.0	1.000040
53000.0	106.3	-62.7		176.0	563.7	30.6	1.000039
53500.0	103.7	-63.2		172.1	564.4	30.8	1.000038
54000.0	101.2	-63.8		168.4	563.7	29.9	1.000038
54500.0	98.7	-64.1		164.0	563.2	27.1	1.000037
55000.0	96.3	-64.2		160.0	563.2	23.4	1.000036
55500.0	94.0	-64.2		156.7	563.1	14.6	1.000035
56000.0	91.7	-64.3		152.9	563.0	0.7	1.000034
56500.0	89.4	-64.4		149.2	562.9	3.7	1.000033
57000.0	87.2	-64.4		145.0	562.9	9.9	1.000032
57500.0	85.1	-64.5		142.1	562.8	12.1	1.000032
58000.0	83.0	-64.5		138.0	562.7	10.2	1.000031
58500.0	81.0	-64.6		135.3	562.6	9.1	1.000030
59000.0	79.0	-64.6		132.0	562.5	9.7	1.000029
59500.0	77.1	-64.7		128.8	562.5	12.2	1.000029
60000.0	75.2	-64.0		125.2	562.4	13.2	1.000028
60500.0	73.4	-63.2		121.7	562.5	13.3	1.000027
61000.0	71.6	-62.5		118.4	563.5	12.5	1.000026
61500.0	69.8	-61.8		115.1	560.4	10.0	1.000026
62000.0	68.1	-61.7		112.3	560.5	7.3	1.000025
62500.0	66.5	-61.6		109.3	560.0	3.6	1.000024
63000.0	64.9	-61.2		106.7	567.2	1.4	1.000024

STATION ALTITUDE 3951.00 FLF1 MSL
20 MAY 62 0800 MDT
ASCISSION NO. 28

UPPER AIR DATA
1400050000
APACHE

GEODETIC COORDINATES
32.02700 LAT DEG
106.39352 LONG DEG

TABLE 1.0 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	WIND VELOCITY KNOTS	WIND DIRECTION DEGREES (IN)	WIND SPEED KNOTS	INDEX OF REFRACTION
63500.0	65.3	-1.0.2		103.0	360.0	3.6	1.000023
64000.0	61.8	-1.9.1		106.7	360.0	6.3	1.000022
64500.0	60.4	-1.8.1		97.0	371.2	9.9	1.000022
65000.0	58.9	-1.7.9		95.3	371.0	11.1	1.000021
65500.0	57.5	-1.7.8		93.0	371.7	10.8	1.000021
66000.0	56.2	-1.7.7		90.8	371.8	9.5	1.000020
66500.0	54.8	-1.7.7		86.0	371.9	8.7	1.000020
67000.0	53.5	-1.7.6		80.5	374.0	9.8	1.000019
67500.0	52.3	-1.7.5		84.4	371.1	11.0	1.000019
68000.0	51.0	-1.7.5		82.4	372.2	11.3	1.000018
68500.0	49.8	-1.7.4		80.4	372.2	11.3	1.000018
69000.0	48.6	-1.7.4		78.5	372.3	10.8	1.000017
69500.0	47.5	-1.7.3		76.7	372.3	9.5	1.000017
70000.0	46.4	-1.7.3		74.6	372.3	8.1	1.000017
70500.0	45.3	-1.7.3		73.1	372.4	5.8	1.000016
71000.0	44.2	-1.7.3		71.3	372.4	4.0	1.000016
71500.0	43.2	-1.7.3		69.0	372.4	2.9	1.000015
72000.0	42.1	-1.7.2		66.0	372.5	1.9	1.000015
72500.0	41.1	-1.7.2		60.4	372.5	.9	1.000015
73000.0	40.2	-1.7.2		64.8	372.5	1.8	1.000014
73500.0	39.2	-1.7.2		63.3	372.6	3.0	1.000014
74000.0	38.3	-1.7.1		61.8	372.6	3.5	1.000014
74500.0	37.4	-1.7.1		60.3	372.6	4.1	1.000013
75000.0	36.5	-1.7.1		58.9	372.7	5.5	1.000013
75500.0	35.6	-1.7.1		57.3	372.7	5.6	1.000013
76000.0	34.8	-1.7.0		56.1	372.7	5.6	1.000012
76500.0	34.0	-1.7.0		54.8	372.7	4.1	1.000012
77000.0	33.2	-1.6.5		53.3	373.5	2.3	1.000012
77500.0	32.4	-1.6.4		51.9	374.0	3.9	1.000012
78000.0	31.6	-1.6.4		50.4	376.2	6.1	1.000011
78500.0	30.9	-1.6.4		49.0	377.0	8.1	1.000011
79000.0	30.2	-1.6.4		47.0	376.9	10.0	1.000011
79500.0	29.5	-1.6.1		46.5	379.4	7.3	1.000010
80000.0	28.8	-1.6.1		45.3	379.7	4.8	1.000010
80500.0	28.2	-1.6.1		44.3	380.0	2.2	1.000010
81000.0	27.5	-1.6.1		43.2	380.2	2.3	1.000010
81500.0	26.9	-1.6.1		42.2	380.5	3.9	1.000009
82000.0	26.3	-1.6.0		41.2	380.8	7.8	1.000009
82500.0	25.7	-1.6.0		40.2	381.0	6.2	1.000009
83000.0	25.1	-1.6.0		39.2	381.3	4.8	1.000009

STATION ALTITUDE 3951.40 FEET MSL
20 MAY 62
ASCLNSLOW 110. 28 0800 MDT

DEPT. AIR DATA
1400500Z
APACHE

GEODETIC COORDINATES
32.02700 LAT N
106.59552 LONG W

TABLE-9 CONT'D

GEOMETRY ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (T)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
03500.0	24.5	-40.3		30.3	581.0		40.0	5.1
04000.0	23.9	-40.1		37.4	581.8		43.2	6.8
04500.0	23.4	-40.9		30.3	582.1		44.0	6.5
05000.0	22.9	-40.7		35.0	582.4		45.3	10.4
05500.0	22.3	-40.5		30.8	582.6		45.3	12.4
06000.0	21.8	-40.3		34.0	582.9		45.3	14.3
06500.0	21.3	-40.1		33.2	583.2		56.9	11.9
07000.0	20.8	-40.9		30.4	583.4		80.9	9.3
07500.0	20.4	-40.7		31.0	583.7		112.5	9.2
08000.0	19.9	-40.4		30.0	584.1		137.3	7.7
08500.0	19.5	-40.8		30.1	584.8		166.6	7.4
09000.0	19.0	-40.2		29.3	585.0		194.0	9.1
09500.0	18.6	-40.6		28.6	586.4		213.1	9.6
90000.0	18.2	-40.0		27.9	587.1		238.2	8.3
90500.0	17.8	-40.5		27.2	587.9		263.5	8.9
91000.0	17.4	-40.9		26.5	588.6			1.000006
91500.0	17.0	-40.3		25.9	589.4			1.000006
92000.0	16.6	-40.7		25.2	590.1			1.000006
92500.0	16.2	-40.1		24.0	590.9			1.000005
93000.0	15.9	-40.5		24.0	591.6			1.000005
93500.0	15.5	-40.9		23.4	592.4			1.000005

STATION ALTITUDE 3951.40 FEET MSL
20 MAY 62 0800 MDT
ASCENSION NO. 28

NAT. TROPY LEVELS
1400050026
APACHE

GEODETIC COORDINATES
32.02700 LAT DEG
106.39352 LONG DEG

TABLE-10

PRESSURE GEO. POTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	TEMP. POINT CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	4915.	19.9	-3.7	20.	329.9	11.8
800.0	6614.	15.7	-4.9	24.	314.1	20.5
750.0	8395.	11.3	-6.0	28.	288.7	22.4
700.0	10271.	7.3	-13.9	19.	282.2	23.0
650.0	12261.	3.8	-17.2	29.	248.4	17.7
600.0	14374.	-1.1	-20.9	20.	239.0	10.6
550.0	16630.	-5.4	-25.7	13.	232.2	21.7
500.0	19065.	-9.8	-30.8	18.	275.3	19.7
450.0	21701.	-15.9	-35.0	17.	290.0	18.9
400.0	24574.	-22.8	-40.0	19.	283.0	17.8
350.0	27734.	-31.1	-46.7	20.	267.2	10.5
300.0	31254.	-39.8	-54.0	20.	273.7	12.0
250.0	35257.	-49.0			231.0	24.3
200.0	39957.	-56.9			274.9	27.6
175.0	42700.	-59.2			260.4	22.5
150.0	45094.	-60.3			254.3	22.3
125.0	49571.	-64.3			267.0	22.7
100.0	54076.	-64.1			284.0	28.7
80.0	58553.	-64.6			101.0	9.1
70.0	61241.	-61.8			100.2	10.4
60.0	64391.	-57.9			70.5	10.1
50.0	68166.	-57.4			113.9	11.3
40.0	72795.	-57.2			131.3	1.9
30.0	78796.	-52.1			175.2	9.5
25.0	82083.	-50.5			20.9	4.8
20.0	87479.	-48.5			129.1	0.2

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4126.59 FEET MSL
20 MAY 82 0900 MDT
ASCENSION NO. 147

SIGNIFICANT LEVEL DATA

140010147
101010MAJ
EQUATORIAL COORDINATES
32.88865 LAT DEG
100.09965 LOG DEG

TABLE-11

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT
874.7	4126.6	21.8	15.0
873.7	4159.2	23.8	15.0
858.8	4649.8	21.6	24.0
850.0	4942.1	20.6	26.0
820.0	5956.9	1.7	26.0
700.0	10316.3	6.4	38.0
686.5	10347.8	5.0	40.0
653.9	12141.3	3.7	40.0
618.5	13620.8	1.7	40.0
584.7	15098.2	-2.4	40.0
567.5	15878.0	-1.8	43.0
500.0	19141.2	-9.7	43.0
444.1	22111.3	-16.7	43.0
400.0	24660.6	-23.8	45.0
318.5	29983.0	-37.9	45.0
300.0	31350.3	-41.4	45.0
250.0	35322.1	-50.9	45.0
228.6	37224.1	-54.8	45.0
221.2	37917.4	-54.8	45.0
208.0	39211.8	-55.5	45.0
200.0	40031.4	-57.7	45.0
179.4	42292.5	-57.6	45.0
170.2	43389.4	-57.0	45.0
150.0	45998.2	-61.6	45.0
139.7	47450.2	-62.6	45.0
127.4	49314.3	-65.5	45.0
120.5	50439.1	-62.6	45.0
111.4	52037.9	-62.2	45.0
104.5	53336.0	-63.9	45.0
100.0	54228.9	-62.6	45.0
88.9	56605.7	-65.7	45.0
81.1	58457.1	-63.5	45.0
78.3	59176.8	-59.1	45.0
70.0	61492.3	-59.8	45.0
54.5	66676.2	-58.3	45.0
50.0	68475.4	-56.5	45.0
38.2	74139.1	-55.1	45.0
39.0	79319.4	-48.5	45.0
25.2	83116.2	-48.3	45.0
21.1	87025.9	3.7	45.0

STATION ALTITUDE 4126.49 FEET MSL
 20 MAY 82 0900 MDT
 ASCENSION NO. 147

SIGNIFICANT LEVEL DATA
 140001014,
 HOLLAND

GEODETIC COORDINATES
 32.88865 LAT DEG
 106.09965 LONG DEG

TABLE-11 cont'd

PRESSURE GEOMETRIC ALTITUDE	TEMPERATURE AIR	REL. HUM. PERCENT
MILLIBARS MSL FEET	DEGREES CENTIGRADE	
20.0 88247.9	-39.5	
17.4 91384.6	-39.3	
14.9 94932.5	-35.4	
11.7 100541.4	-32.8	
10.3 103538.2	-29.1	

STATION ALTITUDE 4126.9 FEET MSL
20 MAY 82
ASCENSION NO. 147 0900 MDT

UPPER AIR DATA
1100010147
HOLLOMAN

TABLE-12

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INCLX OF REFRACTION
4120.0	874.7	21.8	15.0	1031.4	669.0	300.0	1.000247
4500.0	803.3	22.3	21.3	1015.5	670.4	355.7	1.000251
5000.0	848.3	20.5	26.0	1003.5	660.5	350.7	1.000251
5500.0	835.4	19.6	26.0	989.2	667.4	340.2	1.000247
6000.0	818.7	18.6	26.1	975.1	660.3	341.1	1.000242
6500.0	804.0	17.2	27.5	962.3	664.0	334.0	1.000239
7000.0	789.5	15.8	28.9	949.7	663.0	323.4	1.000235
7500.0	775.3	14.3	30.2	937.2	661.4	314.3	1.000232
8000.0	761.4	12.9	31.6	925.0	659.7	306.7	1.000228
8500.0	747.7	11.5	33.0	912.9	650.1	300.1	1.000224
9000.0	734.3	10.1	34.4	901.0	650.4	294.0	1.000221
9500.0	721.1	8.7	35.8	889.3	654.7	287.5	1.000217
10000.0	708.1	7.3	37.1	877.8	653.1	282.3	1.000214
10500.0	695.2	5.9	38.0	866.2	651.4	282.0	1.000210
11000.0	682.4	4.8	36.4	853.7	650.1	280.2	1.000206
11500.0	669.8	4.3	30.9	839.0	649.4	278.0	1.000200
12000.0	657.4	3.8	25.5	825.3	648.8	267.1	1.000194
12500.0	645.1	3.2	24.2	812.3	648.0	254.0	1.000190
13000.0	633.1	2.5	24.6	799.2	647.2	243.0	1.000187
13500.0	621.3	1.9	24.9	786.2	646.4	235.2	1.000184
14000.0	609.6	.6	24.7	774.9	644.9	232.2	1.000181
14500.0	598.2	-.7	24.4	764.3	643.3	234.1	1.000177
15000.0	586.9	-2.1	24.1	753.0	641.0	222.2	1.000174
15500.0	575.8	-2.1	23.5	739.4	641.7	249.4	1.000171
16000.0	564.8	-2.1	23.0	725.3	641.0	200.8	1.000168
16500.0	554.0	-3.3	23.0	714.0	640.2	271.2	1.000165
17000.0	543.3	-4.5	23.0	704.1	639.7	280.7	1.000162
17500.0	532.9	-5.7	23.0	693.7	637.3	283.4	1.000159
18000.0	522.6	-6.9	23.0	683.5	635.8	285.2	1.000157
18500.0	512.6	-8.1	23.0	673.5	634.4	284.1	1.000154
19000.0	502.7	-9.4	23.0	663.0	632.9	282.0	1.000152
19500.0	492.9	-10.5	23.0	653.5	631.3	279.5	1.000149
20000.0	483.2	-11.7	23.0	643.5	630.0	275.5	1.000147
20500.0	473.6	-12.9	23.0	633.7	628.0	270.7	1.000144
21000.0	464.2	-14.1	23.0	624.0	627.2	260.7	1.000142
21500.0	455.1	-15.3	23.0	614.5	625.7	265.7	1.000139
22000.0	446.1	-16.4	23.0	605.1	624.3	263.0	1.000137
22500.0	437.1	-17.8	23.3	596.1	622.0	259.0	1.000135
23000.0	428.2	-19.2	23.7	587.2	620.9	252.0	1.000133
23500.0	419.5	-20.6	24.1	578.4	619.2	250.2	1.000131

STATION ALTITUDE 4126.59 Feet MSL
20 MAY 82 0900 MDT
ASLCLSLN NO. 147

UPPER AIR DATA
1400010147
HOLLOWMAN

STATION ALTITUDE 4126.59 Feet MSL
20 MAY 82 0900 MDT
ASLCLSLN NO. 147

STATION ALTITUDE 4126.59 Feet MSL
20 MAY 82 0900 MDT
ASLCLSLN NO. 147

TABLE 12 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/S	WIND DIRECTION DEGREES (M)	WIND SPEED KNOTS	INDEX OF REFRACTION
24000.0	411.0	-22.0	24.5	569.9	617.5	201.0	14.8	1.000128
24500.0	402.6	-23.4	24.9	561.4	615.8	207.0	14.3	1.000120
25000.0	394.2	-24.7	25.1	552.7	614.1	211.0	13.5	1.000124
25500.0	385.9	-26.0	25.2	543.9	612.5	213.7	12.3	1.000122
26000.0	377.7	-27.3	25.3	535.2	610.8	214.4	11.7	1.000120
26500.0	369.7	-28.7	25.3	526.7	609.2	213.0	11.4	1.000118
27000.0	361.9	-30.0	25.4	518.4	607.5	210.0	11.2	1.000116
27500.0	354.2	-31.3	25.5	510.2	605.9	206.7	11.6	1.000114
28000.0	346.7	-32.6	25.6	502.2	604.2	207.0	11.9	1.000113
28500.0	339.4	-34.0	25.7	494.3	602.5	200.7	11.4	1.000111
29000.0	332.2	-35.3	25.8	486.5	600.9	200.5	10.8	1.000109
29500.0	325.2	-36.6	25.9	478.9	599.2	207.3	10.5	1.000107
30000.0	318.3	-37.9	25.9	471.3	597.5	206.3	10.2	1.000105
30500.0	311.3	-39.2	25.9	463.8	595.8	209.2	11.1	1.000103
31000.0	304.4	-40.5	25.9	455.9	594.2	209.9	12.0	1.000102
31500.0	297.7	-41.8	25.9	448.3	592.6	209.9	13.6	1.000100
32000.0	291.0	-43.0	25.9	440.4	591.0	210.5	15.5	1.000098
32500.0	284.4	-44.2	25.9	432.7	589.5	212.7	18.2	1.000096
33000.0	278.0	-45.4	25.9	425.1	588.0	214.0	20.8	1.000095
33500.0	271.7	-46.6	25.9	417.7	586.4	219.2	22.5	1.000093
34000.0	265.6	-47.8	25.9	410.4	584.9	283.2	24.2	1.000091
34500.0	259.6	-48.9	25.9	403.3	583.3	284.9	24.6	1.000090
35000.0	253.7	-50.1	25.9	396.3	581.8	280.0	25.0	1.000088
35500.0	247.9	-51.3	25.9	389.2	580.3	285.9	26.1	1.000087
36000.0	242.2	-52.3	25.9	381.9	579.0	285.1	27.2	1.000085
36500.0	236.5	-53.3	25.9	374.8	577.0	288.0	28.7	1.000083
37000.0	231.0	-54.3	25.9	367.8	575.3	292.5	30.5	1.000082
37500.0	225.6	-54.8	25.9	360.0	573.7	292.9	30.6	1.000080
38000.0	220.3	-54.8	25.9	351.0	573.0	293.0	30.6	1.000078
38500.0	215.2	-55.1	25.9	343.0	573.3	292.0	29.4	1.000077
39000.0	210.1	-55.4	25.9	335.1	574.9	271.4	29.2	1.000075
39500.0	205.2	-56.3	25.9	329.5	573.7	268.0	29.7	1.000073
40000.0	200.3	-57.6	25.9	323.7	571.9	260.1	30.3	1.000072
40500.0	195.5	-57.7	25.9	318.1	571.9	268.3	29.0	1.000070
41000.0	190.9	-57.7	25.9	308.0	571.4	270.7	27.6	1.000069
41500.0	186.4	-57.6	25.9	301.2	571.9	268.5	26.9	1.000067
42000.0	181.9	-57.6	25.9	294.1	571.4	260.1	26.2	1.000065
42500.0	177.6	-57.5	25.9	288.9	572.1	261.0	24.4	1.000064
43000.0	173.6	-57.2	25.9	279.0	572.5	250.5	22.8	1.000062
43500.0	169.3	-57.2	25.9	273.1	572.5	249.9	21.4	1.000061

** AT LAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
32.08805 LAT DEG
106.09905 LONG DEG

UPPER AIR DATA
1400010147
HOLLOWAY

TABLE-12 cont'd

STATION ALTITUDE 4126.59 FEET MSL
20 MAY 02
ASCENSION 10. 147 0900 MDT

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
44000.0	105.2	-58.1		267.0	571.3	242.3	1.000000
44500.0	161.3	-59.0		262.3	570.2	245.0	1.000058
45000.0	157.4	-59.8		257.1	569.0	247.7	1.000057
45500.0	153.7	-60.7		252.0	567.8	255.7	1.000056
46000.0	150.0	-61.6		247.0	566.6	260.0	1.000055
46500.0	146.4	-61.7		241.2	565.4	274.9	1.000054
47000.0	142.3	-61.9		235.5	564.3	280.3	1.000052
47500.0	139.4	-62.1		230.0	563.0	282.3	1.000051
48000.0	136.0	-63.0		225.4	561.7	279.3	1.000050
48500.0	132.6	-64.0		220.9	560.4	270.2	1.000049
49000.0	129.4	-64.9		216.5	562.2	268.4	1.000048
49500.0	126.2	-65.0		211.3	562.0	261.7	1.000047
50000.0	123.1	-63.7		204.9	563.0	250.1	1.000046
50500.0	120.1	-62.6		198.8	563.3	250.1	1.000044
51000.0	117.2	-62.5		193.8	563.3	250.5	1.000043
51500.0	114.4	-62.3		189.0	563.0	261.0	1.000042
52000.0	111.6	-62.2		184.3	563.8	263.2	1.000041
5250.0	108.9	-62.8		180.3	563.0	260.0	1.000040
53000.0	106.2	-63.5		176.5	564.1	260.5	1.000039
53500.0	103.7	-63.7		172.4	563.4	269.3	1.000038
54000.0	101.1	-62.9		167.0	564.8	271.1	1.000037
54500.0	98.7	-63.0		163.5	564.8	272.3	1.000036
55000.0	96.3	-63.6		160.0	563.9	267.7	1.000035
55500.0	93.9	-64.3		156.6	563.1	253.0	1.000035
56000.0	91.6	-64.9		153.2	562.2	213.9	1.000034
56500.0	89.4	-65.6		150.0	561.3	188.2	1.000033
57000.0	87.2	-65.2		146.1	561.7	182.0	1.000033
57500.0	85.0	-64.6		142.1	562.0	187.7	1.000032
58000.0	83.0	-64.0		138.2	563.4	191.4	1.000031
58500.0	80.9	-63.2		134.3	564.4	194.3	1.000030
59000.0	79.0	-62.2		129.2	563.3	190.0	1.000029
59500.0	77.1	-61.9		125.3	569.0	190.7	1.000028
60000.0	75.2	-59.3		122.0	569.0	193.7	1.000027
60500.0	73.4	-69.5		119.0	569.4	187.4	1.000027
61000.0	71.7	-59.7		117.0	569.2	144.3	1.000026
61500.0	70.0	-59.8		114.3	569.0	54.3	1.000025
62000.0	68.3	-59.7		111.3	569.2	73.0	1.000025
62500.0	66.7	-59.5		108.7	569.4	85.0	1.000024
63000.0	65.1	-59.4		106.1	569.0	80.3	1.000024
63500.0	63.5	-59.2		103.5	569.8	85.2	1.000023

STATION ALTITUDE 4126.59 FEET
20 MAY 52
ASCENSION NO. 147 0900 MDT

UPPER AIR DATA
1400010147
HOLLoman

GEODETIC COORDINATES
32.08805 LAT DEG
106.09965 LONG DEG

TABLE-12 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³	WIND DIRECTION DEGREES (T)	WIND SPEED KNOTS	INDEX OF REFRACTION
6400.0	62.0	-19.1		100.9	02.4	11.3	1.000022
6450.0	60.5	-18.9		98.4	05.0	11.9	1.000022
6500.0	59.1	-18.8		96.0	09.0	12.5	1.000021
6550.0	57.7	-18.6		93.7	09.0	12.8	1.000021
6600.0	56.3	-18.5		91.4	10.9	13.3	1.000020
6650.0	55.0	-18.4		89.1	11.0	12.9	1.000020
6700.0	53.7	-18.0		86.9	11.5	10.4	1.000019
6750.0	52.4	-17.5		84.6	11.2	7.9	1.000019
6800.0	51.2	-17.0		82.4	11.9	6.2	1.000018
6850.0	49.9	-16.5		80.3	12.2	4.8	1.000018
6900.0	48.8	-16.4		78.4	10.2	4.8	1.000017
6950.0	47.6	-16.2		76.5	10.5	5.6	1.000017
7000.0	46.5	-16.1		74.6	10.2	6.2	1.000017
7050.0	45.4	-16.0		72.9	10.6	6.5	1.000016
7100.0	44.3	-15.9		71.1	10.2	6.8	1.000016
7150.0	43.3	-15.8		69.4	10.4	3.8	1.000015
7200.0	42.3	-15.6		67.7	10.5	1.5	1.000015
7250.0	41.3	-15.5		66.1	10.5	2.3	1.000015
7300.0	40.3	-15.4		64.5	10.0	3.9	1.000014
7350.0	39.4	-15.3		63.0	10.0	5.5	1.000014
7400.0	38.5	-15.1		61.4	10.0	4.1	1.000014
7450.0	37.6	-14.8		59.9	10.0	2.9	1.000013
7500.0	36.7	-14.0		58.3	10.7	2.2	1.000013
7550.0	35.9	-13.4		56.6	11.6	1.9	1.000013
7600.0	35.0	-12.7		55.4	10.0	1.5	1.000012
7650.0	34.2	-12.1		53.9	10.4	1.4	1.000012
7700.0	33.4	-11.5		52.5	10.7	2.6	1.000012
7750.0	32.7	-10.8		51.2	10.5	3.7	1.000011
7800.0	31.9	-10.2		49.6	10.5	4.9	1.000011
7850.0	31.2	-9.5		48.0	10.5	6.5	1.000011
7900.0	30.5	-8.9		47.3	10.0	6.5	1.000011
7950.0	29.8	-8.5		46.1	10.0	7.3	1.000010
8000.0	29.1	-8.5		45.1	10.0	9.3	1.000010
8050.0	28.4	-8.4		44.1	10.0	12.8	1.000010
8100.0	27.8	-8.4		43.0	10.0	16.6	1.000010
8150.0	27.1	-8.4		42.1	10.4	17.1	1.000009
8200.0	26.5	-8.4		41.1	10.4	16.2	1.000009
8250.0	25.9	-8.3		40.2	10.5	15.0	1.000009
8300.0	25.3	-8.3		39.3	10.2	11.4	1.000009
8350.0	24.8	-8.3		38.3	10.5	9.9	1.000009

STATION ALTITUDE #126.59 FEET MSL
20 MAY 62 0900 MNT
ASCENSION NO. 147

UPPER AIR DATA
140010147
HOLLISMAN

CLOUDS COORDINATES
32.00005 LAT DEG
106.09965 LONG DEG

TABLE-12 cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (IN) SPEED (KNOTS)	INDEX OF REFRACTION
84000.0	24.2	-17.3		37.3	585.5	159.0	1.000008
84500.0	23.7	-16.7		36.4	586.3	162.0	1.000008
85000.0	23.1	-16.1		35.5	587.0	174.0	1.000008
85500.0	22.6	-15.5		34.6	587.8	185.5	1.000008
86000.0	22.1	-14.9		33.7	588.6	198.1	1.000008
86500.0	21.6	-14.3		32.9	589.3	210.7	1.000007
87000.0	21.1	-13.7		32.1	590.1	227.2	1.000007
87500.0	20.7	-12.0		31.1	592.2	250.1	1.000007
88000.0	20.2	-10.3		30.2	594.5	290.4	1.000007
88500.0	19.8	-7.5		29.5	595.1	328.9	1.000007
89000.0	19.3	-3.5		28.6	595.6	349.0	1.000006
89500.0	18.9	-9.4		28.2	595.6	11.4	1.000006
90000.0	18.5	-9.4		27.6	595.6	67.2	1.000006
90500.0	18.1	-9.4		27.0	595.7	108.5	1.000006
91000.0	17.7	-9.3		26.4	595.7	150.2	1.000006
91500.0	17.3	-9.2		25.8	595.9	188.5	1.000006
92000.0	16.9	-8.6		25.2	596.0	170.1	1.000006
92500.0	16.6	-8.1		24.6	597.3	178.5	1.000005
93000.0	16.2	-7.5		24.0	598.0	179.9	1.000005
93500.0	15.9	-37.0		23.4	598.7	163.5	1.000005
94000.0	15.5	-36.4		22.8	599.4	188.0	1.000005
94500.0	15.2	-35.9		22.3	600.1	193.4	1.000005
95000.0	14.9	-35.4		21.8	600.7	197.2	1.000005
95500.0	14.5	-35.1		21.3	601.0	200.6	1.000005
96000.0	14.2	-4.9		20.8	601.3	204.2	1.000005
96500.0	13.9	-4.7		20.3	601.6	208.1	1.000005
97000.0	13.6	-34.4		19.9	601.8	212.5	1.000004
97500.0	13.3	-34.2		19.4	602.2	217.5	1.000004
98000.0	13.1	-34.0		19.0	602.5	230.4	1.000004
98500.0	12.8	-33.7		18.6	602.8	240.0	1.000004
99000.0	12.5	-33.5		18.2	603.1	258.1	1.000004
99500.0	12.2	-33.3		17.6	603.4	259.2	1.000004
100000.0	12.0	-33.1		17.4	603.7	262.2	1.000004
100500.0	11.7	-32.8		17.0	603.9	255.5	1.000004
101000.0	11.5	-32.2		16.6	604.7	257.0	1.000004
101500.0	11.2	-31.6		16.2	605.5	244.5	1.000004
102000.0	11.0	-31.0		15.8	606.2		1.000004
102500.0	10.8	-30.4		15.4	607.0		1.000003
103000.0	10.5	-29.8		15.1	607.8		1.000003
103500.0	10.3	-29.1		14.7	608.5		1.000003

STATION: ALTITUDE 9126.69 FEET NSL
20 MAY 82
ASCENSION NO. 147 0900 MDT

BAROMETER LEVELS
140001014,
HOLLAND

ORIG. COORDINATES
32.00885 LAT LEG
106.09965 LONG LEG

TABLE-13

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUMIDITY PERCENT	WIND DATA	
				DIRECTION (DEGREES TRUE)	SPEED KNOTS
650.0	4939.	20.6	20.	331.2	0.9
600.0	6045.	16.8	20.	331.2	11.4
750.0	8431.	11.8	33.	300.9	17.0
700.0	10307.	6.4	30.	282.1	21.3
650.0	12280.	3.5	24.	259.9	19.4
600.0	14405.	-5.5	24.	255.0	20.4
550.0	16073.	-9.8	23.	275.2	17.1
500.0	19115.	-9.7	23.	31.5	17.8
450.0	21752.	-15.9	23.	204.0	10.0
400.0	24620.	-23.8	23.	267.0	14.3
350.0	27768.	-32.1	20.	267.0	11.8
300.0	31269.	-41.4		209.9	13.0
250.0	35246.	-50.9		260.0	23.6
200.0	39937.	-57.7		200.1	30.3
175.0	42702.	-57.3		250.7	23.5
150.0	45376.	-61.6		200.1	10.2
125.0	49550.	-64.5		259.7	20.9
100.0	54064.	-62.6		271.9	15.3
80.0	58543.	-61.8		193.3	15.5
70.0	61284.	-59.8		53.3	5.0
60.0	64451.	-58.9		02.0	12.0
50.0	68220.	-56.5		140.2	4.9
40.0	72878.	-55.3		17.5	4.3
30.0	78983.	-48.5		30.5	0.9
25.0	82921.	-40.1		123.9	10.3
20.0	87816.	-39.5		300.4	1.6
15.0	94306.	-35.6		193.3	10.0

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.